



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/560,235

03/24/2006

Marc Limpens

0512-1311

1474

466

7590

02/18/2009

YOUNG & THOMPSON

209 Madison Street

Suite 500

ALEXANDRIA, VA 22314

EXAMINER

WOOD, ELLEN S

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

02/18/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/560,235	<b>Applicant(s)</b> LIMPENS, MARC	
	<b>Examiner</b> ELLEN S. WOOD	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/12/2005</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of Group I, claims 1-15 in the reply filed on November 11, 2008 is acknowledged.

### ***Claim Objections***

2. Claims 1-15 are objected to because of the following informalities: characterized is misspelled in the claims. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims state the phrase "***characterized in that***" The phrase is unclear and indefinite as to the what the scope of the claim entails, as "characterized in that" may be intended to include only the elements recited or may be intended to include the elements recited in addition to other elements or materials not recited.

Claim 6 uses the term "***slight***" which is a subjective term. Thus, making the claim indefinite for failing to particularly point out and distinctly claim the subject matter.

Claim 8 states “***such as, for example***” when referring to the list of materials that could be used as the anti-adhesive agent. The claim could mean that the anti-adhesive agent has to be one of those products or that those are merely examples of an anti-adhesive. Thus, the claim does not particularly point out and distinctly claim the subject matter.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartel et al. (US 4,846,917, hereinafter “Hartel”).

In regards to claim 1, according to the applicant a fabric jacket comprises at least one tubular zone and is constituted by two sheets of fabric which are covered with a coating on one or two faces. The coating is constituted by at least one layer of rubber (pg. 2 para 5). Hartel discloses a method for producing an inflatable hollow body from a double cloth, in which a layer of natural rubber is applied to the upper and lower piles of the double cloth and the edges of the double cloth (textile fabric) are joined with angle braces (col. 1 lines 9-14 and fig. 1). There is a tube that is formed from two superimposed sheets (fig. 2). The upper and lower piles 2 and 3 are coated with gas-tight cover layer 5 and 6 in order to be made air-tight (col. 2 lines 48-50 and figs. 1-2).

Art Unit: 1794

Angle braces 7 and 8 (folded strips) are made of coated fabric (col. 2 lines 65-67 and figs. 1-2). The covering layers of rubber may be reinforced with a woven fabric (col. 1 lines 53-56). In weaving, a woven fabric is formed from warp threads and weft threads. The warp threads are the lengthwise threads and the weft threads are the perpendicular threads that are woven through the warp threads. All of the contacting surfaces between the double cloth 1 and the plies 5 and 6, as well as between these plies themselves and the angle braces 7 and 8 are suitably painted beforehand with an adhesion promoter (col. 3 lines 1-4 and figs. 1-2). The two plies are kept apart by yarns or threads extending at right angles to the plies (col. 2 lines 40-45 and figs. 1 and 2). This is considered an anti-adhesive agent because it keeps the plies separated from one another in specified zones. All of the surfaces and edges to be joined are then briefly pre-pressed with a pressing roller (col. 3 lines 4-5). The double cloth is then inflated and the angle braces firmly contacts the point at which the lower plies and the upper plies meet, contributing to effective secure sealing (col. 3 lines 33-40 and figs. 2).

In regards to claim 2, Hartel discloses that lower plies 2 and 3 are coated with gas-tight cover layers 5 and 6 (col. 2 lines 48-51 and figs. 1-2).

In regards to claim 3, Hartel discloses that the lower plies 2 and 3 may optionally be coated on both sides with natural rubber (col. 2 lines 56-60 and figs. 1-2).

In regards to claim 4, Hartel discloses that the coated layers of the plies and the angle braces are those of (col. 2 lines 48-53).

In regards to claim 6, Hartel discloses that all the surfaces and edges to be joined are then briefly pre-pressed (col. 3 lines 4-5), which would include the angle

Art Unit: 1794

braces. The hollow body is introduced into a vulcanization chamber (col. 3 lines 26-28), which would be considered a heat source.

In regards to claim 7, Hartel discloses that the angle braces 7 and 8 are suitably painted beforehand with an adhesion promoter (col. 3 lines 1-4 and figs. 1-2). Thus, when the angle braces are pressed together they would be adhesively-bonded to the plies.

In regards to claims 10-11, Hartel discloses the covering layers of rubber may be reinforced with a woven fabric (col. 1 lines 53-56). In weaving, a woven fabric is formed from warp threads and weft threads. The warp threads are the lengthwise threads and the weft threads are the perpendicular threads that are woven through the warp threads.

In regards to claim 12, Hartel discloses an inflated tube that is rectilinear (fig. 2).

In regards to claim 15, Hartel discloses that the hollow bodies are suited for the bottoms or side wall of inflatable boats or for inflatable mattresses (col. 2 lines 46-48). It would be obvious to form the hollow body in a torus shape, because the required shape of the hollow body depends of the use of the hollow body.

Hartel is silent with regards to the formation of the folded strips and the use of a plastics material for the cover layer.

In regards to the formation of the folded strips, Hartel discloses angle braces 7 and 8 which are made from coated fabric that may be woven. It would be obvious to form the angle braces with an identical manner in order to ensure the proper mechanical properties for both sides of the hollow body. In the same manner, the angle braces are put in place on the sides (col. 2 lines 65-67 and figs. 1-2). The double cloth

Art Unit: 1794

is then inflated and the angle braces firmly contacts the point at which the lower plies and the upper plies meet, contributing to effective secure sealing (col. 3 lines 33-40 and figs. 2). It would be obvious to one of ordinary skill in the art that the angle braces would be formed from folded strips that were previously cut to have a specific width, length and proper inclination of the warp and weft threads from a strip of coated fabric, otherwise the angle braces would not effectively seal when the body is inflated.

It would be obvious to one of ordinary skill in the art to use a plastics material for the cover layer instead of a rubber layer, because it is known that plastics materials provide barrier protection which would be an effective way to ensure a gas-tight seal.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELLEN S. WOOD whose telephone number is (571)270-3450. The examiner can normally be reached on M-F 730-5 with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Sample can be reached on (571)272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1794

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David R. Sample/  
Supervisory Patent Examiner, Art Unit 1794